28.   (New) A method for power gating a downlink beam frame signal, the method comprising:

transmitting, to form a single frame, at least a first header signal, a first payload signal, a second header signal, and a second payload signal;

when a power gating signal is active, removing RF power from at least one of the first header signal, the first payload signal, the second header signal and the second payload signal, thereby reducing DC power consumption.

29.   (New) The method of claim 28, further comprising hopping the downlink beam frame signal between at least two terrestrial cells.

30.   (New) The method of claim 28, further comprising the step of activating the power gating signal based on the terrestrial cell to which the downlink beam frame signal is currently hopped.

31.   (New) The method of claim 28, further comprising the step of activating the power gating signal based on a statistical multiplexing estimate of downlink frame utilization.

32.   (New) The method of claim 28, further comprising the step of activating the power gating signal in order to maintain at least one data queue on average approximately at preselected occupancy level.

33.   (New) The method of claim 28, further comprising the step of transmitting a first flush signal and a second flush signal, and wherein removing power comprises

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